



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/768,131

01/23/2001

Yong Cheol Park

2080-3-01

3339

35884

7590

10/04/2004

LEE, HONG, DEGERMAN, KANG & SCHMADEKA, P.C.  
801 SOUTH FIQUEROA STREET  
14TH FLOOR  
LOS ANGELES, CA 90017

EXAMINER

ORTIZ CRIADO, JORGE L

ART UNIT

PAPER NUMBER

2655

DATE MAILED: 10/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/768,131	PARK, YONG CHEOL	
	<b>Examiner</b>	<b>Art Unit</b>	
	Jorge L Ortiz-Criado	2655	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 June 2004.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-9 and 11-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 and 11-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Specification*

1. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required:

- a. Claims 7, 9 and 12, recite the limitations “first mode”, “reserving an area” and “reserved areas”. And, Claims 14 and 15 recite the limitations “reserving areas” and “reserved areas”. The specification does not provide proper antecedence basis for these limitations.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-9 and 11-16 are rejected under 35 U.S.C. 102(e) as being anticipated by Takahashi U.S. Patent No. 6,373,800.

Art Unit: 2655

Regarding claim 1, Takahashi discloses a method of formatting a recording medium having a recording capacity, comprising the steps of:

registering defective areas in primary defect lists (PDL) and performing a slipping replacement corresponding to a number of PDL entries (See col. 13, lines 25-36),

determining whether a slipping replacement error occurred in response to the number of PDL entries (see col. 13, lines 38-58):

checking a number of un-slipped PDL entries if a slipping replacement error occurred (see col. 13, lines 38-58) ; and

adjusting the recording capacity of the recording medium based on the number of un-slipped PDL entries (see col. 13, line 58 to col. 14, line 2; col. 14, line 66 to col. 15 line 10).

Regarding claim 2, Takahashi discloses wherein the recording capacity adjusting step comprises excluding a capacity corresponding to the number of un-slipped PDL entries (see col. 13, line 58 to col. 14, line 2; col. 14, line 66 to col. 15 line 10).

Regarding claim 3, Takahashi discloses wherein a recording capacity information written in a specified area of the recording medium is updated to indicate the adjusted capacity, wherein the recording capacity information indicates total logical sector numbers (See col. 7, lines 49-62; col. 13, line 58 to col. 14, line 10).

Regarding claim 4, Takahashi discloses a method of formatting a recording medium having a predetermined recording capacity including a spare area for replacing defect areas, the method comprising the steps of:

registering defective area information in a defect area management list if a command for formatting the recording medium is received (See col. 13, lines 25-36),

replacing the defective areas with corresponding spare areas in response to the number of registered defective areas in the defect area management list during the formatting (see col. 13, lines 38-58);

confirming whether or not an error has occurred due to lack of the spare area in comparison to the defective areas (see col. 13, lines 38-58), and

adjusting the recording capacity of the recording medium based on the number of unreplaced defective areas if it is confirmed that an error occurred (see col. 13, line 58 to col. 14, line 2; col. 14, line 66 to col. 15 line 10).

Regarding claim 5, Takahashi discloses wherein the recording capacity adjusting step comprises excluding a capacity corresponding to the number of unreplaced defective areas (see col. 13, line 58 to col. 14, line 2; col. 14, line 66 to col. 15 line 10).

Regarding claim 6, Takahashi discloses wherein the recording capacity information written in a specified area of the recording medium is updated to indicate the adjusted capacity, wherein the recording capacity information indicates total logical sectors numbers (See col. 7, lines 49-62; col. 13, line 58 to col. 14, line 10).

Art Unit: 2655

Regarding claim 7, Takahashi discloses a method of formatting a recording medium having a predetermined recording capacity including a spare area, comprising the steps of:

registering defective segment addresses corresponding to defective segments in a first defect list in the recording medium if a command for formatting the recording medium is received (See col. 13, lines 25-36),

performing a first mode for defect replacement in response to the defective segment addresses registered in the first defect list during the formatting (see col. 13, lines 38-58);

determining if an error occurred during the a first mode, wherein the error is caused when a size of the defective segments exceeds the spare area (see col. 13, lines 38-58);

stopping the first defect replacement if an error occurred and checking un-slipped segments by determining a number of the defective segments not subjected to the first defect replacement due to insufficient spare area (see col. 13, lines 38-58); and

reserving an area corresponding to the number of un-slipped segments, thereby managing the un-slipped segments continuously (see col. 13, line 58 to col. 14, line 2; col. 14, line 66 to col. 15 line 10)

Regarding claim 8, Takahashi discloses wherein the first defect list is a primary defect list (PDL) (see col. 13, lines 38-58)

Regarding claim 9, Takahashi discloses herein the first mode for defect replacement is a slipping replacement (see col. 13, lines 38-58)

Art Unit: 2655

Regarding claim 11, Takahashi discloses wherein each defective segment comprises a defective sector (see col. 13, lines 38-58).

Regarding claim 12, Takahashi discloses updating a recording capacity information to indicate the reserved areas (see col. 13, line 58 to col. 14, line 2; col. 14, line 66 to col. 15 line 10)

Regarding claim 13, Takahashi discloses wherein the recording capacity information is total logical sector numbers (See col. 7, lines 49-62; col. 13, line 58 to col. 14, line 10).

Regarding claim 14, Takahashi discloses a method of formatting a recording medium having a recording capacity, comprising the steps of:

receiving a command for formatting the recording medium (see col. 13, lines 38-58),  
performing a slipping replacement corresponding to a number of PDL entries if the command is received (see col. 13, lines 38-58),

determining whether a slipping replacement error is occurred in response to the number of PDL entries (see col. 13, lines 38-58),

checking a number of un-slipped PDL entries if the slipping replacement error is occurred (see col. 13, lines 38-58) and

reserving an area corresponding to the number of un-slipped PDL entries to replace the un-slipped PDL entries (see col. 13, line 58 to col. 14, line 2; col. 14, line 66 to col. 15 line 10).

Art Unit: 2655

Regarding claim 15, Takahashi discloses updating a recording capacity information at least to exclude the reserved areas (see col. 13, line 58 to col. 14, line 2; col. 14, line 66 to col. 15 line 10).

Regarding claim 16, Takahashi discloses wherein the recording capacity information is total logical sector numbers (See col. 7, lines 49-62; col. 13, line 58 to col. 14, line 10).

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. U.S. Patent No. 6,741,534 to Takahashi et al., which discloses a method of formatting a recording medium having a predetermined recording capacity including a spare area, comprising the steps of: registering defective segment addresses corresponding to defective segments in a first defect list in the recording medium if a command for formatting the recording medium is received, performing a first mode for defect replacement in response to the defective segment addresses registered in the first defect list during the formatting; determining if an error occurred during the a first mode, wherein the error is caused when a size of the defective segments exceeds the spare area ; stopping the first defect replacement if an error occurred and checking un-slipped segments by determining a number of the defective segments not subjected to the first defect replacement due to insufficient spare area; and reserving an area corresponding to the number of un-slipped segments, thereby managing the un-slipped segments continuously.



***Response to Arguments***

2. Applicant's arguments with respect to claims 1-9 and 11-16 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

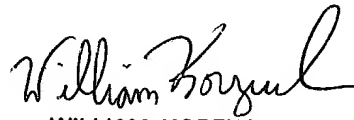
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jorge L Ortiz-Criado whose telephone number is (703) 305-8323. The examiner can normally be reached on Mon.-Thu.(8:30 am - 6:00 pm), Alternate Fridays off.

Art Unit: 2655

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doris H To can be reached on (703) 305-4827. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

joc

  
WILLIAM KORZUCH  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600